

Application No. 10/602,579
Docket No.2003U014.US
Reply to Office Action Dated November 01, 2004

Remarks

Specification

The Examiner objected to the specification at paragraph [0001] for not having updated prosecution information and references. This paragraph has been amended accordingly to reflect the current status of the claims to priority for the present case.

Restriction

Applicant affirms the election of Group I (Claims 1-21) claims, and herein cancels without prejudice Claims 22-24.

Double Patenting

Claims 1-21 are rejected under the judicially created doctrine of obviousness-type double patenting over US 6,703,338. The Applicant herein submits a Terminal Disclaimer complying with 37 CFR 1.321(c).

Claims 1-21 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting over copending USSN 10/058,571, that patent application now having issued as US 6,841,504. The Applicant herein submits a Terminal Disclaimer complying with 37 CFR 1.321(c).

The Applicant requests that these rejections be withdrawn.

Section 112 Rejections, first paragraph

Claims 1 through 16 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. In particular, the Examiner states, in essence, that the claim scope goes beyond what is shown in the actual working examples. The Applicant traverses this rejection.

Application No. 10/602,579
Docket No.2003U014.US
Reply to Office Action Dated November 01, 2004

First, the Applicant has described embodiments of the invention at, for example, paragraph [00306], wherein the heterocyclic compound may be combined with an activator and support in any order.

Second, there is no particular requirement that the Applicant provide any working examples at all. See MPEP § 2164.02 at 2100-187 (Rev. 2 May 2004). In any case, a "specification may describe an actual reduction to practice by showing that the inventor constructed an embodiment or performed a process that met all the limitations of the claim and determined that the invention would work for its intended purpose". MPEP § 2163 at 2100-170 (emphasis added) (citations omitted). The Applicant has in fact exemplified one embodiment falling within the scope of the broadest claims.

The Applicant thus requests that this rejection be withdrawn.

Section 112 Rejections, second paragraph

Claims 1 through 21 were rejected under 35 U.S.C. § 112, second paragraph as indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. The Applicant traverse this rejection.

The Examiner particularly rejections Claims 1 and 13 stating that the "heterocyclic nitrogen-containing ligand is only coordinated to the group 13 atom; chemical sense would seem to indicate that when a group 13 alkyl is reacted with an indole having an active hydrogen atom, a covalent bond is formed between the indole and the group 13 atom with elimination of an alkane". The Applicant wishes to point out that, while this could be a possibility, the Applicant is not claiming a particular activator structure or reaction sequence. Hence, the claims are distinct in that "one skilled in the art" would clearly ascertain the scope of protection being sought.

Claims 12 and 15 are amended as suggested by the Examiner to add an -an- prior to "alumoxane", and change "alkyls" to -alkyl-.

Application No. 10/602,579
Docket No.2003U014.US
Reply to Office Action Dated November 01, 2004

Claim 17 is amended to insert –an– before “alumoxane” and change “alkyls” to –alkyl–.

In Claim 17, the Examiner points out alternate claim language that would shorten the sentence structure. Applicant acknowledges these suggestions, but prefers the precision of definition as is currently in place. Given that one skilled in the art would clearly understand the claim language as written, the Applicant contends that the claim meets the requirements of 35 U.S.C. § 112, second paragraph as being definite.

In Claim 17, the value of “n” in part “(b)” is defined contrary to the Examiner’s suggestion, thus, the Applicant prefers to maintain the language as it is. As for the contention that the species in “(c)” would not be stable when the value of “n=1”, the Applicant does not agree that this is necessarily the case, and even if so, is not aware of any requirement to show that it would be, and to what degree. A chemical species can be defined when n=1 and would be understood to one skilled in the art as written, thus, it meets the criteria of 35 U.S.C. § 112, second paragraph as being definite.

Finally in Claim 17, the Examiner states that “it is also recited that the indole is only contained within the cocatalyst, rather than the indole reacting with formulas (a-c) in the manner recited at the beginning of this numbered paragraph section”. The Applicant contends that this may be true, and that the Applicant has a right to claim the invention as alternate embodiments. The only requirement in this regard is that the claim language define the scope of protection sought to one skilled in the art. The Applicant contends that this has been done in Claim 17.

Claim 18 is amended to replace the Markush group with “methyl, ethyl, propyl, butyl, pentyl, hexyl, cyclopentyl, cyclohexyl, and isomers thereof”, derived from the specification as filed at paragraph [0038], and consistent with the “Group 13 atom-containing compounds” being “alkyl substituted”. No new matter is added.

Application No. 10/602,579
Docket No. 2003U014.US
Reply to Office Action Dated November 01, 2004

Claim 19 is amended to delete much of the Markush group as repetitive and thus not necessary. Finally, while not wishing to be bound by theory, it is likely in one embodiment that in fact the "alkyl" groups are not bound to both the silica and the "alumoxane fragment". However, this is but one embodiment and not claimed here.

The Applicant requests that these rejections be withdrawn.

Section 102 Rejections

Claims 1 through 16 and 21 were rejected under 35 U.S.C. § 102(b) as anticipated by *Resconi et al.* (US 6,608,224). The Applicant traverses this rejection.

Applicant claims a "catalyst composition" including at least one "activator", that activator being "a reaction product of one or more alkyl substituted Group 13 atom-containing compounds and one or more heterocyclic nitrogen-containing compounds" (Claim 1). "Alkyl" groups are well known and distinguished from "aryl" groups. The same applies to Claim 13, alternately claiming "alkyl substituted aluminum-containing compounds".

Resconi, on the other hand, discloses heterocyclic nitrogen-containing species bound to, or the reaction product of, aryl boron or aryl aluminum compounds. (See col. 3, lines 30-65). *Resconi* does not disclose Applicant's invention.

Applicant requests that this rejection be withdrawn.

Section 103 Rejections

Claims 1 through 21 were rejected under 35 U.S.C. § 103(a) as obvious over *Resconi* as cited above. The Applicant traverses, as *Resconi* lacks disclosure of "alkyl substituted Group 13 atom-containing compounds". Thus, a *prima facie* case of obviousness cannot be made.

Applicant requests that this rejection be withdrawn.

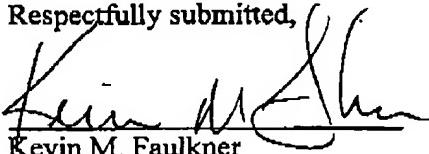
Application No. 10/602,579
Docket No. 2003U014.US
Reply to Office Action Dated November 01, 2004

It is submitted that the case is in condition for allowance. The Applicant invites the Examiner to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Examiner's satisfaction.

January 20/05

Date

Respectfully submitted,



Kevin M. Faulkner
Attorney for Applicants
Registration No. 45,427

Univation Technologies, LLC
5555 San Felipe, Suite 1950
Houston, Texas 77056-2723
Phone: 713-892-3729
Fax: 713-892-3687